

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

WILLOW INNOVATIONS, INC.,

Plaintiff and Counterclaim-Defendant,

v.

CHIARO TECHNOLOGY, LTD.,

Defendant and Counterclaim-Plaintiff.

C.A. No. 2:23-cv-00229-JRG

JURY TRIAL DEMANDED

ELVIE'S OPENING CLAIM CONSTRUCTION BRIEF

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1.	U.S. Patent No. 11,413,380 (“the ’380 Patent”)
2.	U.S. Patent No. 11,357,893 (“the ’893 Patent”)
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I. INTRODUCTION

This case involves a cross-assertion of patents between two competitors in the self-contained, in-bra breast pump market. Plaintiff-Counterclaim-Defendant Willow developed a self-contained, in-bra breast pump using a compressible tube architecture in which actuators compress a flexible tube to create negative pressure and draw milk up through the tube and into a container. Willow introduced a commercial product employing—and secured a patent portfolio claiming—this compressible tube architecture.

Defendant-Counterclaim-Plaintiff Elvie developed a self-contained in-bra breast pump using a diaphragm architecture in which negative pressure generated in a housing is transmitted to the user's breast by a diaphragm to draw milk into a tunnel where gravity acts to pull the milk down into a milk container. Elvie introduced a commercial product employing—and secured a patent portfolio claiming—this diaphragm architecture.

When Elvie's design resonated with consumers better than Willow's design, Willow introduced its own self-contained in-bra breast pump with a diaphragm architecture, the Willow Go product, which Willow acknowledges does not practice any of Willow's own utility or design patents covering its original products. *See Willow's Infringement Contentions (Supplemental Cover Pleading) (Oct. 18, 2023)* (attached as Ex. 8). Rather, the new Willow product infringes Elvie's patents. Unsatisfied with simply infringing Elvie's patents, Willow brought this suit asserting its compressible tube architecture portfolio against Elvie's commercial products with a diaphragm architecture, necessitating construction of disputed terms in Willow's patents in a separate briefing. Elvie, as a result, was forced to counter-assert its patent portfolio against Willow's diaphragm architecture product that departs from Willow's original compressible tube architecture and adopts Elvie's. This brief addresses disputed terms in Elvie's patents.

Willow does not seek to clarify the meaning of ambiguous terms. Both of the terms Willow seeks to construe are easily understood without any construction. Willow, instead, argues that they are indefinite. But the phrases that Willow asserts it cannot understand—like “below” and “continuous”—readily “inform those skilled in the art about the scope of the invention with reasonable certainty” because the claims themselves, as well as the specification, make them crystal clear. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). This clarity is further confirmed by extensive—and unrebutted—expert testimony submitted by Elvie explaining the plain and ordinary meaning of the disputed terms. Willow, in contrast, failed to provide any expert testimony to support its allegations of indefiniteness, relying instead on pure attorney argument. Thus, Willow cannot support its position that easily understood phrases are clearly and convincingly indefinite.

II. BACKGROUND

A. Willow and Elvie

Multiple companies have marketed self-contained in-bra breast pumps in recent years as an alternative to traditional breast pump devices which require users to hold the device in place, as well as remain seated and stationary with the device plugged into the wall. By contrast, self-contained in-bra breast pumps are designed to be held in place by a user’s bra, allowing the user to move around and use their hands for other tasks.

In 2017, Willow released the Willow Pump, a self-contained in-bra breast pump that included both a battery-powered pumping mechanism and a milk container configured to fit within the bra. Willow also filed patent applications covering its alleged inventions embodied in the Willow Pump. The Willow Pump’s design prioritized user flexibility while pumping by making the device less likely to spill regardless of whether the user was sitting, standing, lying down, or bending over. To achieve this goal, Willow’s claimed inventions and commercial

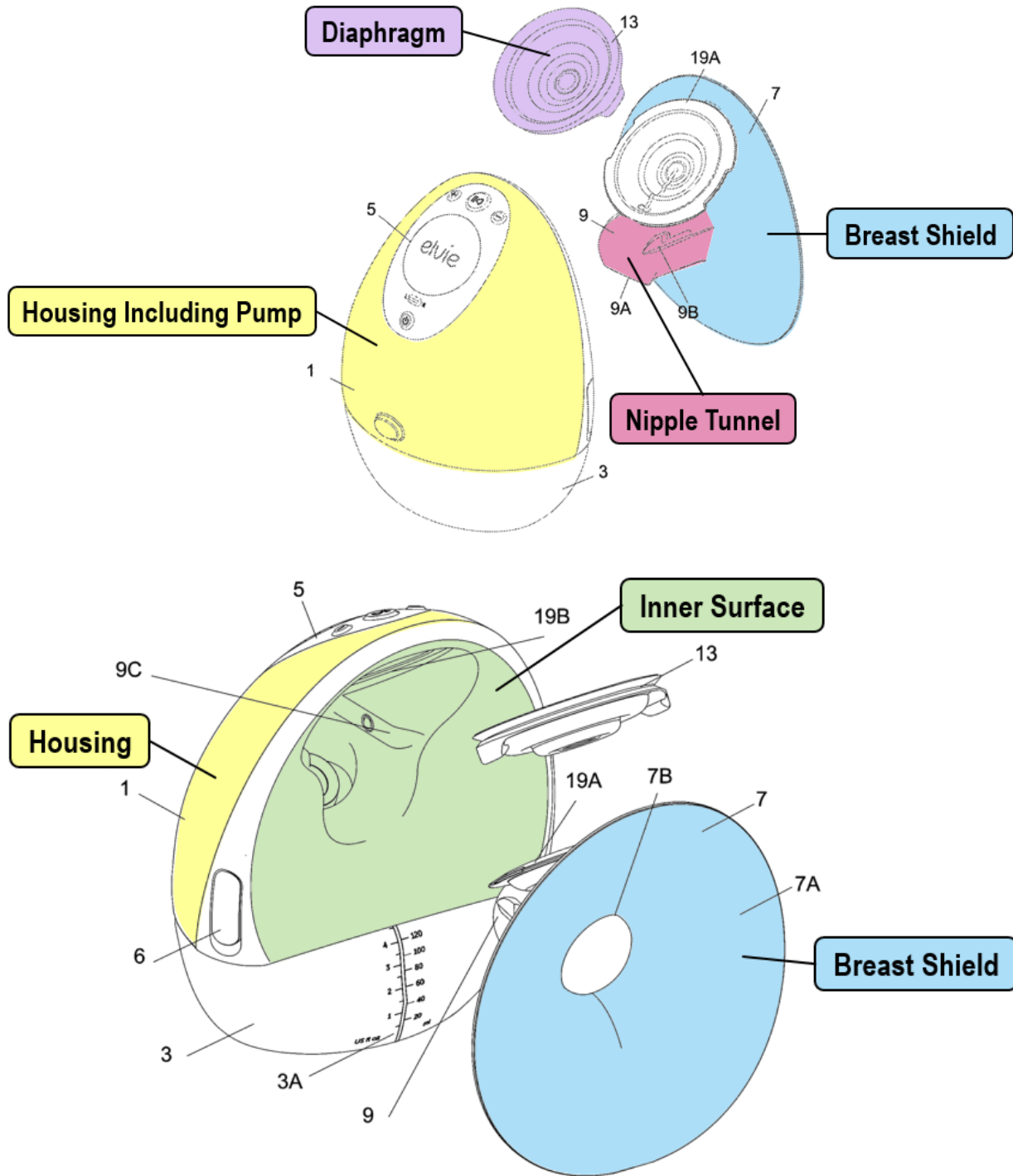
embodiments use a compressible tube architecture which requires relatively heavy components and creates significant noise.

During roughly the same time frame, Elvie independently developed its own patented self-contained in-bra breast pump system, embodied in the Elvie Pump. Elvie focused on reducing the weight and noise of the device. To achieve this goal, Elvie's claimed inventions and commercial embodiments use a diaphragm architecture which is both lighter and quieter than a compressible tube architecture. The Elvie Pump has won over 25 awards for its innovation, including International Design Awards, Mumsnet Awards, Dezeen Awards, Baby Magazine Awards, The Red Dot Awards, and Good Design Awards amongst others.

B. Elvie's Asserted Patents

To protect its pioneering technology, Elvie obtained patents, including Elvie's Asserted Patents, covering its innovative self-contained in-bra breast pump with a diaphragm architecture. Elvie's Asserted Patents, each titled "Breast Pump System," are generally directed to a self-contained in-bra wearable breast pump employing a diaphragm architecture. A diaphragm architecture uses a combination of suction and gravity. Suction extracts the breast milk and gravity draws the extracted milk downward into a collection container.

Several components are present across the inventions in Elvie's Asserted Patents. Each patent claims a housing that includes a battery-powered pump, a breast shield made up of a breast flange and a nipple tunnel, and a milk container configured to be attached to the housing. A subset of Elvie's Asserted Patents claim a diaphragm (or membrane) configured to define a pumping chamber at least in part with an external, user-facing surface of the housing. The diaphragm deforms in response to changes in air pressure caused by the pump to create negative air pressure (i.e., suction) in the nipple tunnel. Illustrative annotated figures (Figs. 3 and 4) from Elvie's Asserted Patents are shown below:



U.S. Patent 11,413,380 (“the ’380 Patent”), or the “Milk/Pump Separation” patent, is directed in part to the diaphragm separating the pump from the milk flowing through the nipple

tunnel and into the milk container (“the milk flow path”). Separating the pump from the milk flow path makes the system easier to clean.

U.S. Patent 11,357,893 (“the ’893 Patent”), or the “Recessed Diaphragm Holder” patent, is directed in part to the diaphragm being seated against a diaphragm holder that forms a recess or cavity at least in part with a recessed surface of the external surface of the housing. The recessed surface of the external surface of the housing provides room within the pumping chamber for the diaphragm to deform toward the housing in response to changes in air pressure. The recessed surface of the external surface of the housing also allows for the diaphragm to self-seal in the diaphragm holder.

U.S. Patent 11,260,151 (“the ’151 Patent”), or the “Low Centre of Gravity” patent, is directed in part to the components of the device being arranged such that the device’s centre of gravity is located below a centre of the nipple tunnel. Having a low centre of gravity prevents the device from feeling top-heavy and improves stability within the bra.

U.S. Patent 11,730,867 (“the ’867 Patent”), or the “Increased Breast Shield Housing Contact” patent is directed in part to the breast shield being configured to contact a majority of a surface of the housing that faces a user’s breast. With such a configuration, the breast shield is the only component which contacts the user’s breast, reducing the number of surfaces that need to be cleaned. This configuration also improves user comfort by dispersing the force applied to the user's breast across a larger area, thereby reducing pressure on the user’s breast.

C. Elvie’s U.S. Patent 11,260,151

Only one of Elvie’s Asserted Patents has claim terms that require construction. The ’151 Patent issued on March 1, 2022, and claims a priority date of June 15, 2017. The invention is directed towards a self-contained in-bra breast pump system with a diaphragm architecture. *See* ’151 Patent, 3:57–62. Claim 1 of the ’151 Patent recites:

A breast pump device that is configured as a self-contained, in-bra wearable device, the breast pump device comprising:

- (i) a housing that includes (a) a battery, and (b) an air pump system powered by the battery and generating negative air pressure;
- (ii) a breast shield made up of a breast flange and a nipple tunnel; and
- (iii) a milk container that is configured to attach to the housing;

and in which *a location of the centre of gravity of the breast pump device is, when in use, below a centre of the nipple tunnel when the milk container is empty.*

Id. at 71:9–21. The other term at issue here appears in claim 22, which recites:

The breast pump device of claim 1, in which the breast shield is a one piece item that in use presents a *single continuous surface* to a nipple and a breast and the breast flange and the nipple tunnel are a single, integral item with no joining stubs.

Id. at 72:27–31.

“A breast pump system is a mechanical or electro-mechanical device that extracts milk from the breasts of a lactating woman.” *Id.* at 1:38–40. In order to extract milk, breast pump systems use a suction generating device to “generate[] a pressure cycle on the user’s breasts to simulate the suction generated by a feeding child.” *See id.* at 1:46–48. As disclosed in the ’151 Patent, “[t]he fundamental breast pump system has not significantly evolved” in recent years, and “only minor technical improvements have been made.” *Id.* at 1:61–63.

“Typical” prior art systems include a freestanding “large suction generating device” that is “attached by air lines to one or two breast shields which engage with the user’s breasts[,]” and separate milk collection containers for expressed breast milk. *See id.* at 1:42–44. Typical breast pump systems came with a number of disadvantages, including that they are “noisy, uncomfortable, and hard to clean.” *See id.* at 1:64–2:4.

Recent improvements in the prior art include “fully integrated” designs, where “the suction source, power supply and milk container are contained in a single, wearable device[.]”

See, e.g., id. at 2:5–9. In other words, fully integrated designs are self-contained in-bra breast pumps. These fully integrated designs “can be provided with a substantially breast shaped convex profile so as to fit within a user's bra[.]” 2:10–12. However, prior art full integrated designs also had significant disadvantages, including noisiness and bulkiness. *See, e.g., id.* at 2:29–30; 2:51–55.

The invention disclosed in the '151 Patent is an improved self-contained in-bra breast pump that addresses these disadvantages, among others. Most relevant here, the breast pump system claimed in the '151 Patent is more comfortable and easier to clean than prior art systems. The claimed breast pump system is more comfortable because the centre of gravity of the pump ensures secure placement within the bra throughout a pumping session, and it is easier to clean because of the single continuous surface presented to the nipple and breast of a user.

III. LEGAL STANDARDS

A. Generally

“‘[T]he claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure-Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). As such, if the parties dispute the scope of the claims, the court must determine their meaning. *See, e.g., Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1317 (Fed. Cir. 2007); *see also Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 390 (1996), *aff'g*, 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc).

When construing claims, “[t]here is a heavy presumption that claim terms are to be given their ordinary and customary meaning.” *Aventis Pharm. Inc. v. Amino Chems. Ltd.*, 715 F.3d 1363, 1373 (Fed. Cir. 2013) (*citing Phillips*, 415 F.3d at 1312–13). Courts must therefore “look to the words of the claims themselves . . . to define the scope of the patented invention.” *Id.*

(citations omitted). “[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” 415 F.3d at 1313. A skilled artisan’s understanding of the claim term, in the context of the entire patent, “provides an objective baseline from which to begin claim interpretation.” *Id.* Where this understanding is not immediately apparent, courts may look to other sources, such as the prosecution history and extrinsic evidence. *Id.*

Intrinsic evidence is the primary resource for claim construction. *See Power-One, Inc. v. Artesyn Techs., Inc.*, 599 F.3d 1343, 1348 (Fed. Cir. 2010) (citing 415 F.3d at 1312). “[T]he ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” 415 F.3d at 1314. *See also Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1319 (Fed. Cir. 2005) (“We cannot look at the ordinary meaning of the term . . . in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history.”). But for claim terms with less-apparent meanings, courts consider ““those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean[,] [including] the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.”” 415 F.3d at 1314 (quoting 381 F.3d at 1116). For example, “[b]ecause claim terms are normally used consistently throughout the patent, the usage of a term in one claim can often illuminate the meaning of the same term in other claims.” *Id.* Expert testimony can also be useful to provide background on the technology, to explain how an

invention works, and to establish that a term has a particular meaning in the pertinent field. *Id.* at 1318.

B. Indefiniteness

“[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). The claims “must be precise enough to afford clear notice of what is claimed,” but that consideration must be made while accounting for the inherent limitations of language. *Id.* at 908. “Indefiniteness must be proven by clear and convincing evidence.” *Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

IV. PERSON OF ORDINARY SKILL IN THE ART

A skilled artisan as of the relevant priority date would have had at least an undergraduate or graduate degree in industrial design, mechanical engineering, electrical engineering, or related field, in combination with at least five years of related work experience developing medical or personal care devices. A higher level of education may compensate for less work experience and vice versa. Also, a skilled artisan may have worked as part of a multidisciplinary team and drawn upon not only his or her own skills, but on the skills of others on the team, e.g., to solve a given problem. *See Fletcher Rep.* ¶¶ 31–36 (attached as Ex. 6).

V. DISPUTED CONSTRUCTIONS

A. Willow has yet to explain its basis for alleging the disputed terms in the ’151 Patent are indefinite.

To date, Willow has failed to disclose a sufficient basis for its indefiniteness theory for the disputed terms of the ’151 Patent and should be precluded from asserting its necessarily novel theory or theories here. In its invalidity contentions, Willow identified, without any

explanation, the “centre of gravity” and “single continuous surface” terms as allegedly being indefinite. Subsequently, Elvie repeatedly informed Willow that its indefiniteness contentions were deficient and requested additional explanation. In an email exchange at the eve of claim construction briefing—and six months after serving its invalidity contentions—Willow eventually provided a barebones basis for indefiniteness for the “centre of gravity” term, noting only “the dynamic nature of ‘when in use.’” Willow has still not disclosed any basis for alleging the “single continuous surface” term is indefinite. Nor has Willow provided expert testimony supporting its position that the claim phrases are indefinite, so Elvie currently has no understanding of the basis of Willow’s indefiniteness positions—and presumably will not until Willow serves its response to this brief. The Court should reject Willow’s belated indefiniteness arguments, whatever form they take, on these grounds alone.

In any event, Elvie has provided expert testimony from Mr. Timothy Fletcher, who has opined that the terms are readily understood by a skilled artisan based on the clear disclosure of the claims and specification. *See generally* Ex. 6 ¶¶ 111–16; 128–33. Mr. Fletcher’s testimony is unrebutted—Willow presented no rebuttal expert testimony. The terms are readily understandable to a skilled artisan and require no additional or different construction to make the phrase understandable to the finder of fact.

B. “a location of the centre of gravity of the breast pump device is, when in use, below a centre of the nipple tunnel when the milk container is empty” (’151 Patent, claim 1)

Asserted Claim 1 of the ’151 Patent recites in part “a location of the centre of gravity of the breast pump device is, when in use, below a centre of the nipple tunnel when the milk container is empty.” Willow may attempt to introduce ambiguity to the meaning of the term by asserting that the relative positions of the centre of gravity and the centre of the nipple tunnel are “dynamic” because a device can be used in multiple orientations. However, the claim language

itself provides more than enough context for a person of ordinary skill to understand this phrase with reasonable certainty. To start, “centre of gravity” is a well-known concept in the art, and every object has a centre of gravity. Ex. 6 ¶ 114. Moreover, the claim specifies the specific orientation of the device and the fill level of the container when the centre of gravity is below a centre of the nipple tunnel as claimed.

Elvie’s proposal	Willow’s proposal
Not indefinite; plain and ordinary meaning	Indefinite

1. The claim language specifies the “when in use” orientation, which a skilled artisan would understand to be generally upright.

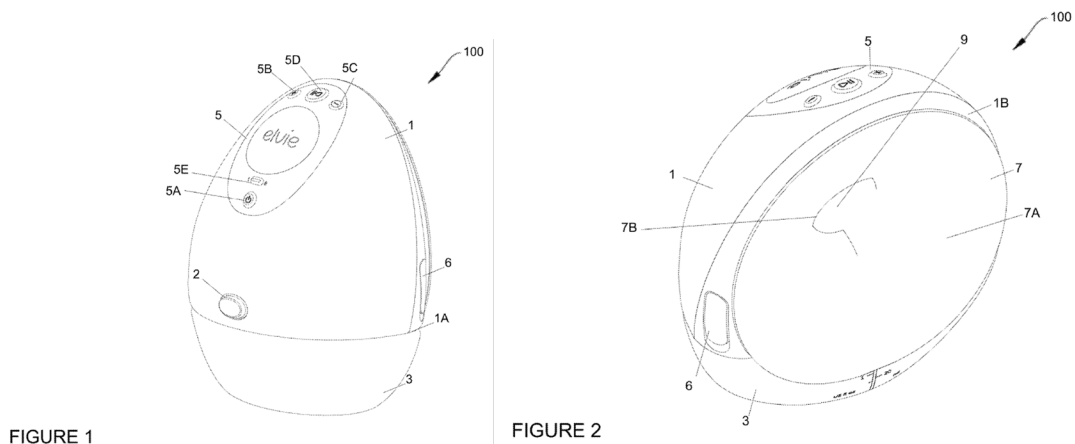
Claim 1 recites that “a location of the centre of gravity of the breast pump device is, *when in use*, below a centre of the nipple tunnel[.]” Here, the claim language itself specifies that the device orientation is “when in use,” which a skilled artisan would understand that a device is generally upright “when in use.” *See* Fletcher Dep. 155:6–11 (attached as Ex. 7) (“[b]ased on the term ‘in use,’ it would be known that it would be in a generally upright position”), *id.* at 155:14–16 (“as one who has designed many breast pumps the term ‘in use’ would be understood to be generally upright”); *see also id.* at 158:5–9 (opining that “generally upright” encompassed “leaning back a little bit, leaning back a little bit forward or back and being straight up”); 157:13–14 (rejecting the proposition that a skilled artisan would have contemplated the use of breast pumps while the user is lying down); 160:22-161:6 (rejecting the proposition that a skilled artisan would have contemplated the use of breast pumps while the user is upside down).

Moreover, the claims that depend on claim 1 also discuss various components being above or below other components. For example, dependent claims 8–10 include specific distances that the centre of gravity could occupy below the centre of the nipple tunnel when in

use. *See* '151 Patent, 71:39–50. Dependent claims 11–12 similarly specify distances that the centre of gravity could occupy “up from a base of the milk container” *See id.* at 71:51–58. Dependent claim 28 recites in part “a diaphragm holder that sits above the breast flange and the nipple tunnel.” *See id.* at 72:55–56. Thus, a skilled artisan would understand from the claims alone that the device has a generally upright position with a well-defined spatial relationship between the base of the milk container and the centre of gravity, the centre of gravity and the nipple tunnel, and the nipple tunnel and the diaphragm holder. Moreover, a skilled artisan would understand that the claims do not contemplate the device being used in orientations where those well-defined spatial relationships would change.

(a) The specification consistently explains that “in use” orientation is generally upright.

The specification repeatedly identifies the device as being upright when in use: “when positioned upright for normal use.” '151 Patent, 36:57, 38:5, 39:59, 40:48, 56:41, 64:17, 64:56, 65:25, 66:27. Similarly, Figures 1–8 of the '151 Patent depict the device in an upright orientation:



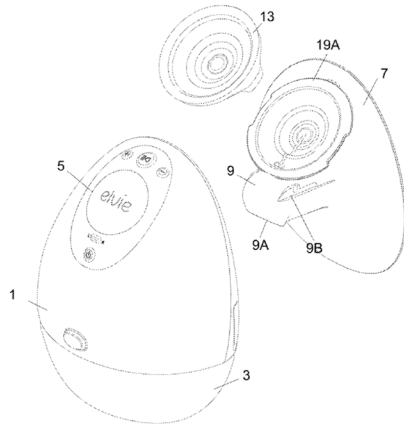


FIGURE 3

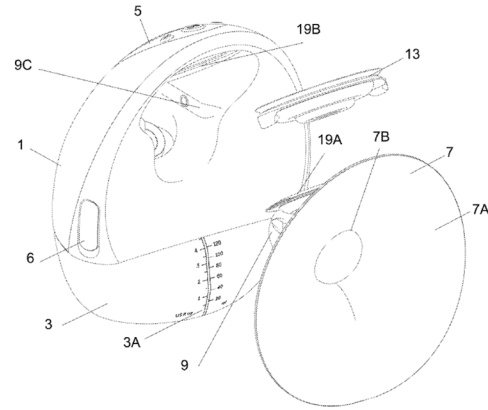


FIGURE 4

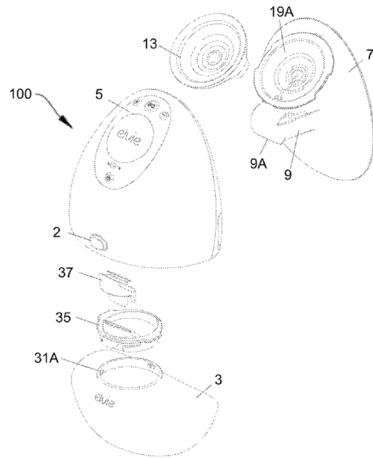


FIGURE 5

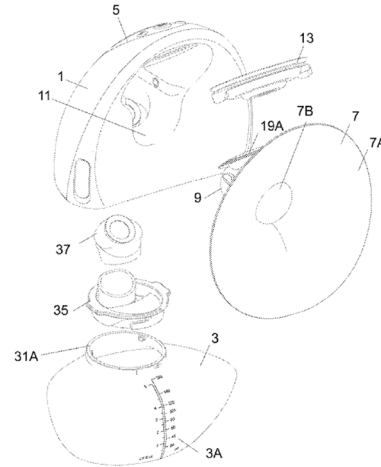


FIGURE 6

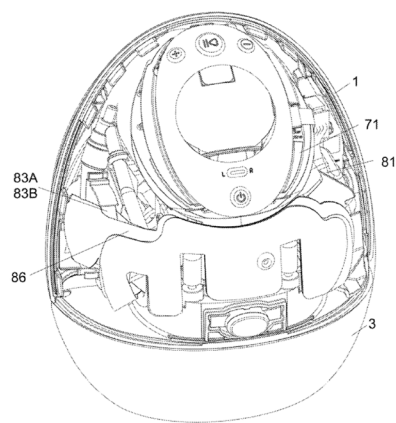


FIGURE 7

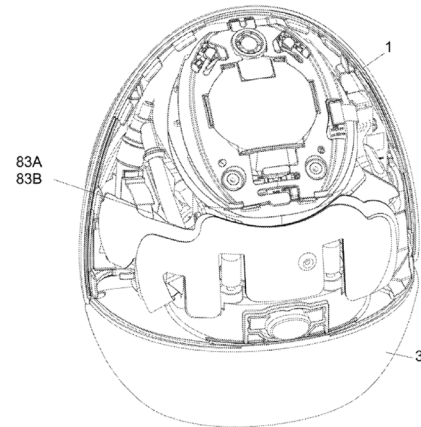


FIGURE 8

Further, when describing an advantage of having a low centre of gravity, the specification

uses terminology that indicates an upright orientation. For example, the '151 Patent states one advantage is “so that the device does not feel *top-heavy* to a person while using the pump.” *See* '151 Patent, 7:25–26 (emphasis added). The benefit of the device not feeling top-heavy is exactly the same as in the ordinary use of that term: objects that are top-heavy pose an increased risk of rotating about their centre of gravity and toppling over. In the context of a self-contained in-bra breast pump device, placing the centre of gravity below the nipple tunnel means the centre of gravity of the device would also be below the top of the bra line, ensuring the device will move down further into the bra of the user as the milk container is filled, as opposed to rotating about the centre of gravity. In contrast, a self-contained in-bra breast pump with a centre of gravity at or above the centre of the nipple tunnel may not have its centre of gravity below the top of the bra line, causing the top portion of the device to rotate away from the breast about the centre of gravity due to the forces acting on the pump. Namely, the two forces that would cause the top portion of the device to rotate away from the breast are (1) the force of the breast on the device, pointed away from the breast above the centre of gravity, and (2) the force of the bra on the device, pointed toward the breast below the centre of gravity.

Similarly, when describing features in various embodiments, the specification uses terminology that indicates an upright orientation. *See, e.g.,* '151 Patent, 6:61–62 (“The milk collection container 3 is attached to a *lower* face 1A of the housing 1...”) (emphasis added). A feature of various embodiments is the breast shield being “generally symmetrical about a centre-line running from the *top* to the *bottom* of the breast shield when positioned upright for normal use.” *See, e.g., id.* at 38:3–5 (emphasis added). Another feature described in various embodiments is that the user “rotates the breast shield in order for the diaphragm to be positioned *on top* of the nipple.” *See, e.g., id.* at 18:65–67 (emphasis added). The numerous descriptions of

“top,” “bottom,” “below,” and “lower,” together with the consistent “normal use” orientation of the figures in the specification, would readily inform a skilled artisan of the generally upright orientation of the device as referenced throughout the claims and specification.

(b) The prosecution history further demonstrates that the “in use” orientation is generally upright.

During prosecution, the examiner noted that “the centre of gravity” did not require an antecedent because “every device would inherently have a centre of gravity.” *See* Excerpts from File History for U.S. Patent No. 11,260,151 at 3–4 (attached as Ex. 5). However, the examiner rejected the pending claims for being indefinite and observed that “the term ‘below’ is a relative direction which is not defined by the claim and could be interpreted differently depending on the orientation of the device,” differentiating between an “up-right/in-use condition” and “the device [] resting on a table with the housing 1 in fig. 4 on the table[.]” *Id.* at 8. The examiner explicitly stated, however, that “for the purposes of indicating allowable subject matter, the claim is interpreted as being in an in-use condition.” *Id.* at 8. This confirms that a skilled artisan would understand the “in-use” orientation to be upright as shown in Figs. 1–8. As suggested by the examiner, Elvie then amended the claims to specify that the device orientation was indeed “when in use,” and the examiner subsequently withdrew the indefiniteness rejection and allowed the application. *See id.* at 16.

(c) Willow’s apparent argument that the orientation of the device and location of the centre of gravity are “dynamic” ignores the full context of the specification.

To support its contention that the orientation and relative positions of the centre of gravity and the centre of the nipple tunnel are “dynamic” while in use, Willow may attempt to read additional “in use” orientations into the ’151 Patent where none exist. This is not only misguided, but it is reversible error. *See Eidos Display, LLC v. AU Optronics Corp.*, 779 F.3d

1360, 1365 (2015) (“If the patentee wanted to deviate from the standard practice and claim a novel [feature], some teaching of how to depart from the common practice would not only be expected, but is required.”) (reversing summary judgment of invalidity for indefiniteness because only one of the possible interpretations of claim language aligned with the understanding of a skilled artisan).

First, Willow may rely on language in the specification relating to how the device includes a system that uses light emitters and detectors to accurately measure liquid levels in the milk container (“the system”). For example, Willow may argue that the specification’s disclosure that the system “derives or infers the mother’s activity, such as walking, standing, or lying activities,” *see* ’151 Patent, 48:29–30, implies that the device can be used while lying down. However, as discussed above, Mr. Fletcher explained that “generally upright” includes lying back or bending forward within a range that would be understood by a skilled artisan. Thus, Willow’s purported evidence of indefiniteness supports the well-defined scope of the term instead of contradicting it.

Second, Willow may argue that the depiction of the system in Fig. 28, depicting how the system works in a different orientation, implies that there is no limit to the range of orientations the device can operate in. However, Fig. 28 simply discloses how the system can accurately measure the volume of milk in the milk container when the top surface of the milk is not parallel to the detectors on the bottom of the pump housing. For comparison, Fig. 27 discloses how the system can accurately measure the volume of milk in the milk container when the top surface of the milk is parallel to the detectors. As discussed above, the location of the centre of gravity is measured relative to other fixed points of the pump when generally upright. The fact that Fig. 28 depicts the device “at a different orientation” is of no moment in determining the range of

orientations that the device can be used in, and certainly does not expand or contradict the generally upright orientation described in other sections of the specification.

A skilled artisan would understand the meaning of the term “centre of gravity” and, in light of the specification, would understand the proper measurement of its location relative to the centre of the nipple tunnel and the base of the device. Further, a skilled artisan would understand the range of orientations within the scope of “in use” (i.e., generally upright) and that the utility of the centre of gravity being below the centre of the nipple tunnel would be preserved across the entire range of “in use” orientations. Accordingly, the Court should find this term not indefinite and construe the term to have its plain and ordinary meaning.

2. The location of the centre of gravity cannot change relative to the other device components as the claims specify that the container is empty.

Asserted Claim 1 of the ’151 Patent recites in part “a location of the centre of gravity of the breast pump device is . . . below a centre of the nipple tunnel *when the milk container is empty.*” Although the exact location of the centre of gravity may change relative to the other device components depending on the amount the container is filled with milk, the claim specifies that the milk container is empty. When empty, the centre of gravity does not change relative to the other device components—the centre of gravity is static, not dynamic. *See* Ex. 6 ¶ 115 (explaining that “the centre of gravity of an object does not change with orientation or location[,]” and the empty milk container limitation ensures “there is no question of how much milk is in the container or the density of milk.”). *See also* Ex. 7 160:16–22.

3. Mr. Fletcher’s expert testimony is un rebutted.

As previously noted, Elvie is the only party to offer the opinion of an individual with actual experience in the art. Willow’s arguments are not only incorrect based on the claim language, specification, and prosecution history, but are pure attorney argumentation untethered

by the perspective of a skilled artisan. As explained above, Mr. Fletcher presented his opinion on the definiteness of the term in a report and was subsequently deposed by Willow. Mr. Fletcher’s report confirms that “a ‘centre of gravity’ is a well-known concept in the art” and that “[e]very object has a centre of gravity.” Ex. 6 ¶ 114. Further, he explained that “the centre of gravity of an object does not change with orientation or location.” Mr. Fletcher also described how a skilled artisan would understand the position of the centre of gravity relative to the centre of the nipple tunnel serves a core purpose of the invention and why a skilled artisan would understand the specification to include a well-defined range of generally upright “when in use” orientations. *See, e.g., id.* ¶ 115; Ex. 7 155:6-14, 158:5-9, 160:22-161:6.

C. “a single continuous surface” (’151 Patent, claim 22)

Asserted claim 22 of the ’151 Patent recites “the breast shield is a one piece item that in use presents *a single continuous surface* to a nipple and a breast and the breast flange and the nipple tunnel are a single, integral item with no joining stubs.” ’151 Patent, 72:27–31. It is difficult to discern what Willow could contend is indefinite about “single,” “continuous,” or “surface,” or the phrase as a whole. Regardless, the plain language of the claim is sufficient for a skilled artisan to understand this term.

Elvie’s proposal	Willow’s proposal
Not indefinite; plain and ordinary meaning	Indefinite

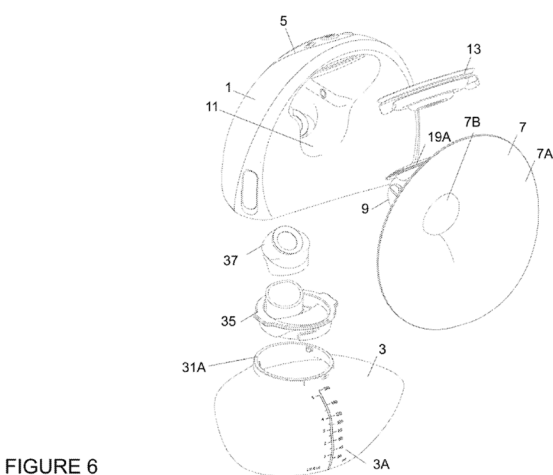
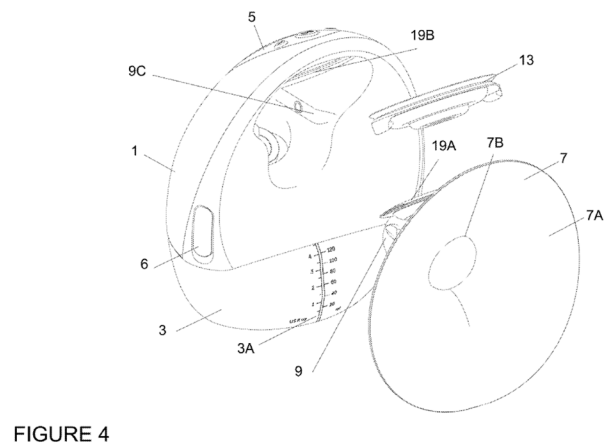
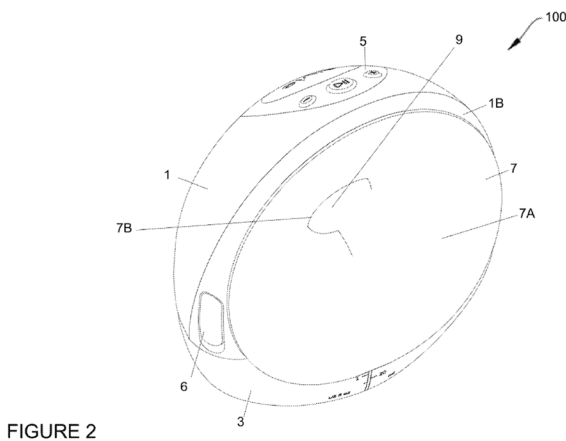
1. The claim language provides a clear definition of “single continuous surface.”

The meaning of “single continuous surface” is clear from the plain language of the claim. As discussed above, claim 22 recites in part “the breast shield is a *one piece item* that in use presents a *single continuous surface* to a nipple and a breast” *Id.* at 72:28–30 (emphasis

added). A “single” surface has the same meaning as the breast shield being a one-piece item—there is only one. The meaning of the word “continuous” is similarly well-established. *See Schreiber Foods, Inc. v. Beatrice Cheese, Inc.*, 31 F. App’x 727, 731 (Fed. Cir. 2002) (“The accepted meaning of ‘continuous’ is: marked by uninterrupted extension in space, time, or sequence.”) (citing *Webster’s Ninth New Collegiate Dictionary* at 284). Accordingly, a skilled artisan would understand the meaning of the term from the claim language alone.

2. The specification discloses what a single continuous surface is.

Figures 2, 4, and 6 illustrate the continuous inner surface of an exemplary one-piece breast shield 7, as shown below:



As shown, the inner surface of breast shield 7 is formed as one-piece (“single”), and there are no discontinuities or interruptions in the surface. These figures, read in conjunction with the claim language, further inform a skilled artisan of what constitutes a single continuous surface on the inner surface of a one-piece breast shield.


3. Mr. Fletcher’s un rebutted expert testimony: a skilled artisan would understand the meaning and utility of the breast shield being a single continuous surface.

As Mr. Fletcher stated in his report, a skilled artisan “would understand that a breast shield comprised of only one piece would only present as a single continuous surface to a nipple and a breast because there are no other pieces to create multiple surfaces or discontinuities in the surface.” Ex. 6 ¶ 130. These disclosures alone would readily inform a skilled artisan of the meaning of this term. *See id.* ¶¶ 130–33. Mr. Fletcher’s testimony is un rebutted.

VI. CONCLUSION

For the foregoing reasons, the Court should adopt Elvie’s proposal that these terms have plain and ordinary meaning.

Dated: August 8, 2024



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CERTIFICATE OF SERVICE

The undersigned hereby certifies that counsel of record who are deemed to have consented to electronic services are being served with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3) on August 8, 2024.

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